

IN THE CLAIMS:

Please amend claims 1, 5, 15, and 19 as follows. Please add new claims 29 and 30 as follows.

1. (Currently Amended) A method ~~of recovering location information of a subscriber in a mobile network, the method~~ comprising:

recovering location information of a subscriber in a mobile network;

forwarding a registration request from the subscriber to a Serving-Call State Control Function (S-CSCF) including the subscriber's Transport Address (TA) which is a current Care of Address of the subscriber;

forwarding a location update of the subscriber in the mobile network from the S-CSCF to a Home Subscription Server (HSS) including the subscriber's TA and an address of the S-CSCF; and

storing data regarding the location update including the subscriber's TA in the HSS so as to be protected against loss of the location information of the subscriber in the mobile network.

2. (Original) The method of claim 1, wherein, upon the S-CSCF losing data, lost data including the subscriber's TA may be restored to the S-CSCF from the data stored in the HSS.

3. (Original) The method of claim 1, wherein storing data in the HSS comprises storing data in a non-volatile memory in the HSS.

4. (Original) The method of claim 3, wherein storing data in a non-volatile memory in the HSS comprises storing data in a hard disk drive.

5. (Currently Amended) A method ~~of recovering location information of a subscriber in a mobile network, the method~~ comprising:

recovering location information of a subscriber in a mobile network;

forwarding a registration request from the subscriber to a Serving-Call State Control Function (S-CSCF) including the subscriber's Transport Address (TA); which is a current Care of Address of the subscriber;

forwarding a location update of the subscriber in the mobile network from the S-CSCF to a Home Subscription Server (HSS) including the subscriber's TA; and

storing data regarding the location update including the subscriber's TA in the S-CSCF so as to be protected against loss of the location information of the subscriber in the mobile network.

6. (Original) The method of claim 5, wherein, upon the S-CSCF losing data, lost data including the subscriber's TA may be restored to the S-CSCF from the data stored in a non-volatile memory in the S-CSCF.

7. (Original) The method of claim 6, wherein storing data in a non-volatile memory in the S-CSCF comprises storing data in a hard disk drive.

8. (Previously Presented) A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method of recovering location information of a subscriber in a mobile network, the method comprising:

forwarding a registration request from the subscriber to a Serving-Call State Control Function (S-CSCF) including the subscriber's Transport Address (TA) which is a current Care of Address of the subscriber;

forwarding a location update of the subscriber in the mobile network from the S-CSCF to an Home Subscription Server (HSS) including the subscriber's TA and an address of the S-CSCF; and

storing data regarding the location update including the subscriber's TA in the HSS so as to be protected against loss of the location information of the subscriber in the mobile network.

9. (Original) The program storage device of claim 8, wherein, upon the S-CSCF losing data, lost data including the subscriber's TA may be restored to the S-CSCF from the data stored in the HSS.

10. (Original) The program storage device of claim 8, wherein storing data in the HSS comprises storing data in a non-volatile memory in the HSS.

11. (Original) The program storage device of claim 10, wherein storing data in a non-volatile memory in the HSS comprises storing data in a hard disk drive.

12. (Previously Presented) A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method of recovering location information of a subscriber in a mobile network, the method comprising:

forwarding a registration request from the subscriber to a Serving-Call State Control Function (S-CSCF) including the subscriber's Transport Address (TA) which is a current Care of Address of the subscriber;

forwarding a location update of the subscriber in the mobile network from the S-CSCF to a Home Subscription Server (HSS) including the subscriber's TA; and

storing data regarding the location update including the subscriber's TA in the S-CSCF so as to be protected against loss of the location information of the subscriber in the mobile network.

13. (Original) The program storage device of claim 10, wherein, upon the S-CSCF losing data, lost data including the subscriber's TA may be restored to the S-CSCF from the data stored in a non-volatile memory in the S-CSCF.

14. (Original) The program storage device of claim 13, wherein storing data in a non-volatile memory in the S-CSCF comprises storing data in a hard disk drive.

15. (Currently Amended) A method of ~~recovering location information of a subscriber in a mobile network, the method~~ comprising:

recovering location information of a subscriber in a mobile network;

upon a Serving-Call State Control Function (S-CSCF) receiving a call setup request for the subscriber from an Interrogating-Call State Control Function (I-CSCF), the S-CSCF forwards a route request to a User Mobility Server (UMS) and receives a home address from the UMS;

forwarding the call setup request from the S-CSCF to a home agent at the home address of the subscriber;

forwarding the call setup request from the home agent to the subscriber;

and

forwarding an address update from the subscriber to the S-CSCF.

16. (Previously Presented) The method of claim 15, wherein forwarding the request to the UMS comprises forwarding an indication to the UMS that the S-CSCF fails to have a Care Of Address of the subscriber.

17. (Previously Presented) The method of claim 15, wherein forwarding the call setup request from the home agent to the subscriber comprises forwarding the call setup request to a Care Of Address of the subscriber.

18. (Previously Presented) The method of claim 16, wherein forwarding the call setup request from the home agent to the subscriber comprises forwarding the call setup request to a Care Of Address of the subscriber.

19. (Currently Amended) ~~A method of recovering location information of a subscriber in a mobile network, the method comprising:~~

recovering location information of a subscriber in a mobile network;

upon an Interrogating-Call State Control Function (I-CSCF) receiving a call setup request for the subscriber, the I-CSCF forwards a route request to a User Mobility Server (UMS) and receives a home address of the subscriber from the UMS;

forwarding the call setup request from the I-CSCF to a home agent at the home address of the subscriber;

forwarding the call setup request from the home agent to the subscriber; and

forwarding an address update from the subscriber to the I-CSCF.

20. (Previously Presented) The method of claim 19, wherein forwarding the call setup request from the home agent to the subscriber comprises forwarding the call setup request to a Care Of Address of the subscriber.

21. (Previously Presented) A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method of recovering location information of a subscriber in a mobile network, the method comprising:

upon a Serving-Call State Control Function (S-CSCF) receiving a call setup request for the subscriber from a Interrogating-Call State Control Function (I-CSCF), the S-CSCF forwards a route request to a User Mobility Server (UMS) and receives a home address of the subscriber from the UMS;

forwarding the call setup request from the S-CSCF to a home agent at the home address of the subscriber;

forwarding the call setup request from the home agent to the subscriber;

and

forwarding an address update from the subscriber to the S-CSCF.

22. (Previously Presented) The program storage device of claim 21, wherein forwarding the request to the UMS comprises forwarding an indication to the UMS that the S-CSCF fails to have a Care Of Address of the subscriber.

23. (Previously Presented) The program storage device of claim 21, wherein forwarding the call setup request from the home agent to the subscriber comprises forwarding the call setup request to a Care Of Address of the subscriber.

24. (Previously Presented) The program storage device of claim 22, wherein forwarding the call setup request from the home agent to the subscriber comprises forwarding the call setup request to a Care Of Address of the subscriber.

25. (Previously Presented) A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method of recovering location information of a subscriber in a mobile network, the method comprising:

upon an Interrogating-Call State Control Function (I-CSCF) receiving a call setup request for the subscriber, the I-CSCF forwards a route request to a User Mobility Server (UMS) and receives a home address of the subscriber from the UMS;

forwarding the call setup request from the I-CSCF to a home agent at the home address of the subscriber;

forwarding the call setup request from the home agent to the subscriber;
and

forwarding an address update from the subscriber to the I-CSCF.

26. (Previously Presented) The program storage device of claim 25, wherein forwarding the request to the UMS comprises forwarding an indication to the UMS that the S-CSCF fails to have a Care Of Address of the subscriber.

27. (Previously Presented) The program storage device of claim 25, wherein forwarding the call setup request from the home agent to the subscriber comprises forwarding the call setup request to a Care Of Address of the subscriber.

28. (Previously Presented) The program storage device of claim 26, wherein forwarding the call setup request from the home agent to the subscriber comprises forwarding the call setup request to a Care Of Address of the subscriber.

29. (New) A system comprising:
a first forwarding unit configured to forward a registration request from a subscriber of a mobile network to a Serving-Call State Control Function (S-CSCF) including the subscriber's Transport Address (TA) which is a current Care of Address of the subscriber;

a second forwarding unit configured to forward a location update of the subscriber in the mobile network from the S-CSCF to a Home Subscription Server (HSS) including the subscriber's TA and an address of the S-CSCF; and

a memory configured to store data regarding the location update including the subscriber's TA in the HSS so as to be protected against loss of the location information of the subscriber in the mobile network.

30. (New) A system comprising:

a first forwarding unit configured to forward a route request, upon a Serving-Call State Control Function (S-CSCF) receiving a call setup request for a subscriber of a mobile network from an Interrogating-Call State Control Function (I-CSCF), from the S-CSCF to a User Mobility Server (UMS);

a receiving unit configured to receive a home address from the UMS;

a second forwarding unit configured to forward the call setup request from the S-CSCF to a home agent at the home address of the subscriber;

a third forwarding unit configured to forward the call setup request from the home agent to the subscriber; and

a fourth forwarding unit configured to forward an address update from the subscriber to the S-CSCF.